

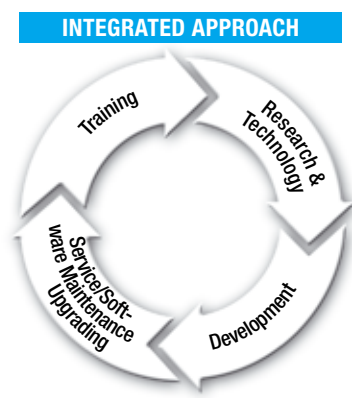
# System Development

## Avionics for Helicopters

### Tailor-made Avionic Systems

The services provided by the ESG Elektroniksystem- und Logistik-GmbH in the range of avionic system development for helicopters with its manifold activities, which constitute the system engineering, software development, system integration, simulation and logistics covers

- ▶ preliminary phase analyses
- ▶ conceptual design
- ▶ definition
- ▶ implementation
- ▶ cockpit simulation
- ▶ avionic systems integration
- ▶ logistic support
- ▶ training

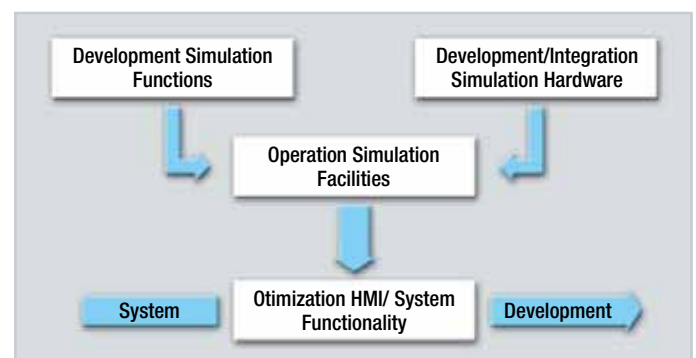


**TOTAL SYSTEMS CAPABILITY**

In a continuous dialogue with our customers, our experienced team implements its specific requirements as a tailor-made solution. The overall result is based on detailed analyses of cost, efficiency and risks. ESG is regarded as a professional, competent and reliable partner among its customers from the armed forces, public authorities and industry.

#### Your benefit

- ▶ Risks are detected at an early stage and become manageable.
- ▶ The total systems approach, instead of uncoordinated single problem solutions, leads to modular, cost-efficient development of mission systems, which comply with customers' requirements by means of tailor-made, upgradeable solutions.
- ▶ Development times of electronic systems shrink significantly and consequently, costs are reduced.
- ▶ Avoidance of expensive faulty developments by entering into a dialogue with the user of mission systems early in the project.
- ▶ Less staffing due to the development of low-manpower and efficient logistic support procedures.



## International Partner

ESG plays a major part in all relevant national and multinational helicopter programmes with German participation, especially in the application of leading-edge avionic system technology. Examples of this are the ongoing programmes

- ▶ UH TIGER,
- ▶ NH 90,
- ▶ MAT (**M**issions-**A**usrüstungs-**T**räger ▶ a flying helicopter test bed),
- ▶ CVA (**C**ockpit-**V**ersuchs-**A**ufbau ▶ a fixed-base cockpit simulator),
- ▶ MILDS (**M**issile **L**aunch & **D**etection **S**ystem ▶ Integration in CH53),

as well as research and technology programmes like the experimental system

- ▶ HiWaS (**H**indernis-**W**arn-**S**ystem ▶ obstacle warning system),
- ▶ Crew Assistance,
- ▶ RMK (**R**ückstoßfreie **M**aschinen-**K**anone ▶ recoilless machine gun system),

and Safety Analyses (EC135, EC145, CH-53G, ACT/FHS).

Internationally the ESG performs with local partners modernization programmes such as the upgrade of the AB 212 helicopter with the MOD Austria. Based on the wide experience with different types of helicopters and mission equipment the ESG supports as system architect numerous German state polices at their complete helicopter procurement process from the tender preparation to the helicopter delivery.

ESG's services, which are impartial with regard to hardware manufacturers, are directed at optimum accomplishment of the task. They are appreciated both by manufacturing industry, since ESG is not a direct competitor, and by the customer, who attaches great importance to ESG's impartiality with respect to hardware interests.

Through its competent and efficient method of working, customers obtain from ESG optimized solutions to problems to fulfil their requirements.

